

Abstract of the Disclosure

A method for recycling latex-containing broke is provided. Specifically, the present inventors have discovered that mechanical treatment may be employed to rework latex-containing broke for reuse in various products without the need for treatment with chemicals, such as hypochlorite, chlorine, or hypochlorous acid. As a result of mechanical treatment, fiber aggregates (e.g., combination of short fibers, fiber fragments, and/or latex) are formed that have a relatively small size. Besides having a reduced size, the fiber aggregates have also been unexpectedly discovered to have other unique properties. For instance, a large portion of the resulting fiber aggregates may be relatively free from the latex polymer. Specifically, the fiber aggregates contain a "core" of latex from which extend short fibers and/or fragments that are uncoated with the latex. The result is fiber aggregates that are uniquely "partially coated" with a latex polymer. When recycled in paper products, these fiber aggregates may impart a variety of benefits, such as increased bulk retention and high water capacity without any loss in absorbency rate.